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## A NEW GERBIL (GENUS GERBILLUS) FROM THE CHAD

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During a study of the rodents of Libya (Ranck, 1968) an undescribed subspecies of *Gerbillus pyramidum* was recognized but because it was extralimital to that study, its description was postponed.

Capitalized color terms are from Ridgway, "Color Standards and Color Nomenclature, 1912," and all measurements are in millimeters.

This new subspecies from the northern Chad may be known as:

### Gerbillus pyramidum tibesti new subspecies

Holotype: Adult male, skin and skull, U.S. National Museum No. 319721, from Zouar, Tibesti Mountains, Republic of the Chad; obtained 10 April 1961 by H. W. Setzer, original number 3042.

Specimens examined: Twenty-five, from Chad: Zouar, 16; Ounianga Kebir, 9.

Diagnosis: Dorsum Clay Color to Cinnamon grading to Cinnamon-Buff on sides, subauricular regions and flanks; rostral, mystacial, supra-orbital, circumoral and pectoral areas white; eye ring dark brown; pinna of ear sparsely haired, same color as dorsum and with row of buffy hairs along anterior margin; vibrissae short with both brown and white hairs; fore and hind feet richly haired and bearing five digits, each with a claw; tail relatively long, distinctly bicolored with a distinct median line of Cinnamon hairs which gradually shade into a conspicuous pencil; entire underparts white. Skull: relatively large and massive, braincase relatively flattened; zygomata heavy; supra-orbital beads prominent; anterior palatine foramina relatively long and wide, auditory bullae large and bulbous; rostrum long and narrow.

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JUN 3 0 1971 LIBRARIES Measurements: Averages and extremes of eight adult males and seven adult females from the type locality, with the measurements of the type in brackets, are: total length 284.4 (270–300), 268.9 (258–282), [292]; length of tail 165.9 (158–176), 157.7 (146–166), [173]; length of hind foot 35.3 (34–37), 33.9 (32–37), [35]; length of ear 16.6 (15–18), 15.9 (15–18), [17]; occipitonasal length of skull 34.2 (32.7–35.2), 32.6 (31.5–33.9), [35.0]; length of auditory bulla 12.2 (11.9–12.7), 11.9 (11.5–12.5), [12.2]; crown length of upper molariform toothrow 4.2 (4.0–4.3), 4.2 (3.8–4.3), [4.4]; greatest breadth across zygomatic arches 17.9 (17.0–18.7), 17.1 (16.7–17.5), [18.3]; least interorbital breadth 6.6 (6.2–7.1), 6.3 (5.9–6.6), [6.8]; breadth of rostrum at level of antorbital foramina 3.5 (3.4–3.8), 3.4 (3.2–3.5), [3.6]; length of nasals 14.0 (13.0–14.6), 12.8 (12.4–13.2), [14.4].

Comparisons: From representatives of Gerbillus pyramidum pyramidum from Imbaba, El Aiyat and Abu Ghalib, Giza Province, Egypt, Gerbillus pyramidum tibesti differs in markedly smaller size of body and skull, shorter ears, narrower and relatively longer rostrum, less robust zygomata, and relatively as well as actually longer, more conspicuously bicolored tail with a more prominent pencil. In color, G. p. tibesti is generally lighter (more orangish) and has more conspicuous postauricular patches. This new subspecies is smaller in all cranial measurements, being of comparable size only in the length of the auditory bullae and the nasals.

Compared with topotypes of *Gerbillus pyramidum tarabuli* from Sebha, Fezzan Province, Libya, *G. p. tibesti* has a markedly longer tail, a more flattened braincase, heavier zygomata, more prominent supra-orbital beads, longer and more rounded auditory bullae and longer nasals. These gerbils from the Tibesti Mountains are more brilliant in dorsal color (more orangish), have more distinctly bicolored tails and have less suffusion of grayish hairs on the dorsum of the body and tail.

Members of this subspecies can be distinguished from the type and type series of *Gerbillus pyramidum hamadensis* from Derg, Tripolitania Province, Libya, by their markedly larger, more massive skulls, more flattened braincases, longer and wider anterior palatine foramina, less bulbous auditory bullae, more orangish dorsal color and longer and more distinctly bicolored tails with darker pencils. In cranial measurements, *G. p. tibesti* is significantly larger than *G. p. hamadensis* except in the length of the upper molariform toothrow and breadth of the rostrum at the level of the antorbital foramina.

In dorsal color, this subspecies apparently resembles *Gerbillus rosalinda* St. Leger from Abu Zabad, Sudan, but based on measurements of the latter species, as given by Setzer (1956:490), *G. p. tibesti* is significantly larger in all respects.

In their paler dorsal color, longer and more tufted tails, and larger size of all cranial and external characters, these gerbils from the Tibesti Mountains differ markedly from representatives of *Gerbillus pyramidum hirtipes* from Ein Sefra, southwestern Algeria.

Remarks: Members of this subspecies can be distinguished from all others of Gerbillus pyramidum by their relatively as well as actually longer tails and more brilliant (orangish) dorsal color.

This subspecies is known from only two localities in the vicinity of the Tibesti Mountains. Owing to the desolate character of the surrounding areas and the inaccessible position of these mountains in the Saharan interior, attempts to collect mammals from here have been sporadic and of brief duration. The mammalian fauna of this region is accordingly poorly known. The specimens now available for study were obtained by the senior author during a trans-Saharan expedition in the spring of 1961.

The range of this subspecies is probably much greater than these few specimens would indicate and probably includes portions of northern Niger, Darfur Province, Sudan, and the Serir Tibesti and northern outliers of the Tibesti Mountains in southern Libva.

The specimens from Ounianga Kebir on the eastern side of the mountains are strikingly similar to those from Zouar on the west side, but differ from the latter in their slightly smaller size of body, tail, hind feet and ears, and slightly darker, more subdued dorsal color. Cranially, the two populations are indistinguishable. Apparently suitable habitat is of widespread occurrence throughout the lower confines of the mountains enabling these gerbils to maintain interbreeding populations and thus insure genetic uniformity.

These specimens represent the first records of *Gerbillus pyramidum* from the Tibesti Mountain area. Dalloni (1936) and Scortecci (1942) published reports on the mammals from this area, but made no mention of this species.

The subspecies name *tibesti* refers to the mountain complex of this name located in the northern Chad.

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